ABSTRACT

[Problems] The face of a document is to be efficiently illuminated by conversely utilizing the characteristic of the compound parabolic concentrator (CPC) to convert scattered lights extending over a full angle from a limited area into radiant lights confined to a prescribed emission angle and thereby minimizing the expansion of lights.

In a light guide 10 which emits lights incident from an end face from an emitting face 4 disposed along the longitudinal direction while having the lights reflected by its internal face, its sectional shape in a direction orthogonal to the longitudinal direction of this light guide has two opposite parabolas 2 and 3, a line segment connecting the focal points a and b of the two opposite parabolas 2 and 3, and a line segment (bottom face) 1 corresponding to the emitting face 4. A scattering pattern consisting of white ink is formed on the line segment (bottom face) 1 connecting the focal points a and b.